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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,108

04/16/2004

Donghui Wu

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EXAMINER

VU, NGOC YEN T

ART UNIT

PAPER NUMBER

2622

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/826,108	<b>Applicant(s)</b> WU, DONGHUI	
	<b>Examiner</b> NGOC-YEN T. VU	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 9, 10, 13 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7-8, 11-12, 14-17, 19-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/29/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments, see pages 9-10, filed 07/29/2009, with respect to the rejection(s) of claim(s) 1, 6, 9, 10, 13 and 18 under Luo (US 2005/0047656) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a different interpretation of the Luo '656 reference and a new ground of rejection are made in view of Schildkraut et al. (US 6,292,574) and Gaubatz et al. (US 2003/0202105).

### ***Claim Rejections - 35 USC § 102***

3. Claims 1, 6, 9, 10, 13 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Luo (US 2005/0047656).

Regarding ***Claim 1***, Luo teaches a method for removing a red eye from an image, comprising:

calculating a weighted red value for each pixel in the image, wherein the weight red value for a pixel is based on (1) red, green, and blue color values of the pixel and (2) a luminance of

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the pixel in the image [In ¶0059-0062; Luo teaches that the pixel redness is calculated as  $R = (\alpha.r + \beta.g + \gamma.b) / (r+g+b+d)$ . It is inherent that the divisor  $(r+g+b+d)$  represents the luminance of the pixel and the value of  $d$  is increased according to the brightness of the pixels];

selecting a plurality of pixels in the image having weighted red values greater than a threshold as red eye pixels (¶0074-0076); and

correcting the red eye pixels to remove the red eye from the image (¶0106-0114).

Regarding **Claim 6**, Luo teaches the method of claim 1, prior to said correcting, further comprising grouping a plurality of red eye pixels that are contiguous into a red eye region (¶0065-0071, 0081, 0088-0089); and

determining if the red eye region comprises a substantially round pupil (¶0082, 0090); and rejecting the plurality of red eye pixels when the red eye region does not comprise a substantially round pupil (¶0083-0084, 0090).

Regarding **Claim 9**, Luo teaches the method of claim 6, further comprising determining if the red eye region is too close to another red eye region formed by grouping another plurality of red eye pixels that are contiguous (¶0095-0098); and

rejecting the plurality of red eye pixels when the red eye region is too close to said another red eye region (¶0095-0098).

Regarding **Claim 10**, Luo teaches the method of claim 9, wherein said determining if the red eye region is too close to another red eye region comprises determining if a geometric center of the red eye region is within a range of distances of another geometric center of said another red eye region, wherein the range of distances is proportional to a pupil radius of the red eye region (¶0095-0098).

Regarding *Claim 13*, Luo teaches the method of claim 9, further comprising determining if the red eye region is proximate to a facial region (§0091-0094); and rejecting the plurality of red eye pixels when the red eye region is not proximate to a facial region (§0091-0094).

Regarding *Claim 18*, Luo teaches the method of claim 13, further comprising determining if the red eye region is proximate to a sclera (§0085; 0095, 0117-0123); and rejecting the plurality of red eye pixels when the red eye region is not proximate to a sclera (§0117-0123).

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schildkraut et al. (US 6,292,574).

Regarding *Claim 1*, Schildkraut teaches a method for removing a red eye from an image, comprising:

calculating a weighted red value for each pixel in the image, wherein the weight red value for a pixel is based on (1) red, green, and blue color values of the pixel and (2) a luminance of the pixel in the image (see col. 9:12-59);

selecting a plurality of pixels in the image having weighted red values greater than a threshold as red eye pixels (see col. 9:60-65); and

correcting the red eye pixels to remove the red eye from the image (see col. 1:37-48).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Gaubatz et al. (US 2003/0202105).

Regarding *Claim 1*, Gaubatz teaches a method for removing a red eye from an image, comprising:

calculating a weighted red value for each pixel in the image, wherein the weight red value for a pixel is based on (1) red, green, and blue color values of the pixel and (2) a luminance of the pixel in the image [see ¶0045-0049];

selecting a plurality of pixels in the image having weighted red values greater than a threshold as red eye pixels (¶0050); and

correcting the red eye pixels to remove the red eye from the image (¶0010).

#### ***Allowable Subject Matter***

6. Claims 23-24 are allowed.
7. Claims 2-5, 7-8, 11-12, 14-17 and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGOC-YEN T. VU whose telephone number is (571)272-7320. The examiner can normally be reached on Mon. - Fri. from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*/Ngoc-Yen T. VU/  
Primary Examiner, Art Unit 2622  
09/29/2009*